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BACKGROUND OF THE INVENTION

Computer networks provide an efficient means for transporting data between workstations or terminals on (or connected to) the network. Such networks can consist of Local Area Networks (LANs), which are generally restricted to one geographical area or location. Such networks can also include Wide Area Networks (WANs) which connect a number of machines over a larger geographic area. The Internet is also an example of one such network. The Internet is a worldwide system of computer networks -- or a network of networks -- wherein users at any one computer can, if they have permission, get information from any other computer. The Internet was conceived by the Advanced Research Projects Agency (ARPA) of the U.S. government in 1969 and was first known as the ARPANet. The original aim was to create a network that would allow users of a research computer at one university to be able to "talk to" research computers at other universities. A side benefit of the ARPANet design provided that messages can be routed or rerouted in more than one direction, and that the network can continue to function even if parts of it were destroyed in the event of a military attack or other disaster (including simple down-time of component parts).

Today, the Internet is a public, cooperative, and self-sustaining facility accessible to hundreds of millions of people worldwide. The Internet is providing ever increasing opportunities for persons across the world to interact with each other via a relatively cheap medium of communication. A person might use a computer to pull up a website and see information that might pertain to an organization to which that person belongs, or is affiliated. Many such websites require a registration procedure to be completed, wherein the user provides certain personalized information and is assigned an identifier to use when accessing the site. Through this identifier, the user can access personal, or private information from a database or the like associated with the website. The personalized identifier generally prevents such information from being accessed by other users of the website.

Many Internet sites also have community aspects associated with them. Community aspects provide the ability for a member to interact with a variety of other members on the site who share a commonality. For instance, the user might post and/or retrieve information from a website, or certain areas of a website. Depending upon the nature of the information being posted or retrieved, security issues become important in

discerning who will be allowed to become a member of any given community and thereby retrieve and/or post specific information.

In present Internet sites, an impetus is placed on personalization of an individual's experience on a website by providing them easy access to only the information that is relevant to the interests that they have identified. The information then provided is a subset of the significant amount of information that is available on the website. Such tailoring of information to the individual can provide incentive for people to join a website, and thereby increase the size of the registration databases as quickly as possible. Larger registration databases and the ability to target messages to groups of members with definable demographics provides the ability for websites to charge higher advertising rates. Additionally, larger registration databases generally lead to a higher relative valuation for the website company. Internet sites with registration systems are generally populated by various users coming to the site for the content and communities contained therein. Typically, a certain amount of content and limited access, if any, to communities is provided to casual visitors to the site. Increased access to content and communities is offered thereafter upon completion of the registration process. Membership in more than one website community requires that the individual have a separate membership identifier and password for each community they are part of. This results in the need for the individual to log-in separately to each website community in order to access the information contained therein. The information in each website must be manually reviewed and consolidated in order to get a comprehensive summary of all of the activities and responsibilities the individual has in their different communities.

The combination of privacy concerns about undesired use of user registration information, and security concerns about access to information in a user community often makes it difficult to expand a registration database. In such situations where registration is required, many users are dissuaded from joining because of the requirement to provide certain personal information. Such users believe that their privacy is being violated, as many websites will thereafter forward (or sell, or datamine) a user's information, for marketing purposes and the like. This is particularly true where the community information involves children, or other family members, or a particular user. To overcome the concerns of privacy and security, a website must provide a significant benefit to the member in exchange for the risks that are perceived. Such opportunities

often occur with website communities involving sporting events, school events, or the like. For instance, an individual may be a participant in multiple sport teams, events or organizations, each having a separate schedule of events. Such information in a website might include scheduled events and games and specifics on their locations, news about teams and events, and so forth. A parent or guardian may likewise have several children, each of whom participate in multiple teams, events or organizations, yet are dependent on their parents for transportation and other means of involvement. The management and consolidation of information across multiple community websites for several family members can be very tedious and subject to error.

Accordingly, what is needed in the field is a method and apparatus that allows a user to have a more efficient means access to all of the website information that is relevant to their participation in multiple communities (games, organizations, and events). This should also include access to the different communities that their children may also participate in. This should include a means by which access to the information contained within multiple communities can be accomplished through a single member identifier and password. A structured level of access to various community information should be provided, wherein a user's access to information is based upon a security access level granted by other members of that community. This could result in an individual's access to different communities to vary, even though a single member identifier and password is used to access them.

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of web pages, some of which are restricted to viewing only by Members and their selected invitees. A given page may be viewable in two or more versions, with elements on the page appearing or being hidden from view depending on the access level that the individual has in relation to the page. Many of the elements on the page are contained within capsules that show a summary of the information that is displayed on the page that is linked to the capsule.

Three (3) types of Communities are described, and access to the list of each Community's members is available only to the owner (or administrator) of the Home pages which are associated with each Community. A first type of Community includes a Members own Home page, and contains personalized material pertaining to that Member and summary information from the community websites in which the Member is an invited participant. A second type of Community includes a Team Home page, and contains Team information. A third type of Community includes a League Home page, and contains League information. These particular Communities are presented by way of example, and the present invention is not intended to be limited to these three example Communities. The same functionality has wide applicability to families, schools, community groups, scouting organizations and the like. A school implementation could, but is not necessarily restricted to, be organized around a specific school, which may or may not have a shared affiliation with other schools, and also around its classes and the students. An implementation for a family could, but is not necessarily restricted to, be organized around an extended family or a family-oriented organization, such as a church or community group, and also around a family, extended or immediate, and the individual members of that family. A implementation for a community group could, but is not necessarily restricted to, be organized around a specific organization or church which sponsors it, and which may have shared affiliation with other groups and organizations, and also around the group itself and the individual members of the group. An implementation for scouting could, but is not necessarily restricted to, be organized around a specific regional scouting group, which may or may not have an affiliation with a larger organization, and also

As an example, when a parent is added to the information for a child, they are automatically granted access to the child's home page and to any team or league that the child is a participant in. When an individual is unassigned to a team or is assigned to a team, the access of their parents, and non-parental contacts are changed to match the relationship of the child to those communities. An individual cannot invite someone to have an access level higher than they themselves have. An individual's access to a community is enabled once they have accepted the invitation. An administrator for the community can alter the level of access granted to the individual, either before or after an individual accepts the invitation.

An Administrator will monitor membership of such community members and can completely remove, or just deny trusted access, to any member whose conduct on the website does not fit the desired standards of the community. To facilitate website communities that are components of organizations that also have a non-website presence, individuals can be added to a community's listing without being invited to join the community as a member on the website. This can include (for example) members who once had trusted access to the community, but subsequently had it removed by a community administrator.

The website structure provides for multiple communities to be present, some of which may have a relationship to each other. For example one community may be a subset of a larger community, and membership in the subset community may include membership in the larger community. Additionally, a given member may themselves be a member of multiple communities, and may have responsibility for family members who themselves are members of communities.

The information that is posted and viewable on one community's pages may also automatically be made available to view on another community's pages, when the communities have a superset/subset relationship. For example a game scheduled by the league will appear on the schedule for the teams that are playing in the game. Likewise, the score of a game entered by a team will appear on the scoreboard for the league that the team is in. If a team administrator enters a player into the team roster, the player will also appear on the league's roster.

Whereas a registered member usually sends out invitations based upon a trusted relationship they might have with another person, a messaging center associated with the website might automatically send out invitations based upon certain conditions or events.

Further, the website might use shell accounts to hold role and security associations associated with an invited person until that invitation is accepted. When accepted, the shell account is turned into a member account for the invited person, who then becomes a registered member.

According to one aspect of the present invention, a method is provided for populating a website membership database and providing access by a website user to a plurality of associated information areas, the method comprising: providing at least a first information area having information that is personal to a member user; providing at least one other information area having information overlying the first information area; facilitating invitations from the member user to a non-member user, the non-member user thereafter choosing to become a new member; determining an access level of the new member based upon their relationship status to the member user that added them, and based upon the context in which they were added, whereby the membership database is thereby populated with known members of a community; and allowing access to certain of the information areas based upon the access level of the member user.

According to still another aspect of the present invention, a method is provided for selective access to information areas that represent shared community information areas on a website structure, the website structure having a registration database of members, the database being populated by persons with a known relationship to existing members, the method comprising: assigning a personal information area to each registered member; configuring at least one other community information area with information that overlays the personal information area; registering new members based upon a known relationship with existing members; assigning an access level to each new user based upon this known relationship; and providing access to the information areas based upon the assigned access level.

According to still another aspect of the present invention, a method is provided for structuring and populating a website having a registration database of registered members and at least two layers of inter-related community information areas, the

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facilitate description of the sports-oriented myteam.com website example. A "Member" is an individual who has registered with the myteam.com website, and has been assigned a "Member-ID" (or symbol) and password. The Member uses this Member-ID and associated password when logging onto the system. Each Member is assigned a "My Home" personal page. A "Visitor" is not a myteam.com Member, or is an individual viewing the site without currently being logged in. A Visitor cannot see any My Home personal pages. In order to see such pages, a Visitor must be invited by the individual who "owns" the page through an "Invitation". Upon accepting the Invitation, the Visitor will become a myteam.com Member in the process. "Administrator" is an individual with "owner" or primary edit control over the web pages for a given community. "Friends" include other Members who must be invited by the individual to see their personal My Home page. "Participants" derive from a private relationship granted by a League or Team Administrator to only those who play on the team, are the parents of those who play on the team, and are those who directly participate in the running of the team and/or its parent league. At the discretion of the Administrator, such a relationship can include reciprocal pre-granted access between the personal My Home pages of the Team Participants.

Regarding specific Team or League Home pages, a "Fan" is a trusted relationship that must be granted or provided through an Invitation by the Administrator of the Team or League. Invited Fans must become a myteam.com Member, if they are not already. Fans include trusted friends and family (who are not parents of players) and do not directly participate in the running of the Team. A "Spectator" is a site Visitor or Member who has not been granted Fan access to the Home page. The Spectator might also be referred to as an "Anonymous Guest".

Invitations include an Invitation-Number that must be used to accept the Invitation. For any individual who is added to a community and is not identified as a current website Member by the inclusion of a valid Member-ID, a “Shell Account” is created for that individual. This Shell Account contains the security relationship of that individual in relation to the specific community or communities that they are added to. This Shell Account also includes the general information entered for the individual, such as email address, phone number, etc. When an Invitation is sent to an individual to join, the included, and required, Invitation-Number is directly linked to this Shell Account. Upon

accepting the Invitation, the user must complete the registration form, which is pre-populated with the general information that was entered when the individual was added to a community. When the registration form is successfully completed and submitted, the Shell Account is replaced with a “Member Account” which references the Member-ID and which contains the primary information about this website Member and all security access relationships to all communities in which the Member is a Participant.

An individual is sent and accepts an invitation in the following manner. A personal Invitation (with an Invitation-Number) would be sent by paper or email, inviting the recipient to view a My Home, Team Home and/or League Home page. The recipient would take the Invitation-Number and go to the myteam.com registration page, which prompts for the Invitation-Number. The system uses the Invitation-Number to reference the Shell Account that contains the security relationships between the new Member and any My Home, Team Home and/or League Home pages to which they have been invited. The new Member gets their own My Home page, and links on their My Home mini-site pages to the My Home, Team Home and/or League Home pages to which they were invited. When an individual accepts an Invitation to a My Home page, the link to the invitor's My Home page is on their My Fans page. When the individual accepts an Invitation to a Team Home and/or League Home page, the link to the respective Home pages is in their My Teams capsule and on the My Teams page. If the individual invited is already a Member, upon entering their Invitation-Number on the registration page, they will be given access to the respective Home pages using their current Member-ID and single log-in.

Information displayed on Home pages is organized into 3 distinct views – a “Capsule”, a page and a detail page for a specific item of information. A Capsule is shown on a Home page and lists a summary of the most relevant content that is displayed on the page and to which the Capsule itself links. For each item of information there is a linked detail page that shows all of the information for that specific item. For those individuals with Administrator access to the specific information, a “edit” link is displayed that goes to an editable version of the detail information page for that item. Clicking on a specific item of information in the Capsule will go directly to its respective detail information page, and will display the “edit” link if the individual has “write” access. Clicking on the named header of the Capsule, or on the button of the same name

in the navigation bar, will go to the general page for that type of information. The specific items of information displayed in a Capsule and on its linked page can come from another Home page mini-site. The ability of an individual to see a specific item of information on a My Home, Team Home or League Home page, capsule or page linked in the mini-site is based on their security access to that type of information on the Home page that it comes from.

Referring again to Figure 1, the myteam.com home page 102 is shown as the entry point for users entering the website. Visitors 104 can access a variety of general tabbed information 106, or overview information 108. Such overview information 108 is shown to include various information "About myteam.com." Example topics that are listed include: overview, partners & users, myteam.com Pros, Advisory board, Press Releases, Positive Quotes, Contact information, Preview information, jobs at myteam.com, and advertising information. The tabbed information includes: "News & Events," "Sports Central," "Fun & Games," "Community," and "Store." The "News & Events" tab can be used to pull up topics such as: feature stories, news headlines, multimedia, columns, sports wire, events, or news submission. The "Sport Central" tab is shown to include: Instruction about various sports (i.e. drill strategies, game instruction), 101 sports (i.e. descriptions of various sports), mental edge, training room, organizations, information about myteam.com experts, and print center information. The "Fun & Games" tab includes: online games, backyard games, comics, trivia & crosswords, free stuff, and contest information. The "Community" tab includes: related articles, polls (i.e. favorite equipment, etc.), "ask the pro" information, issue of the week, and live chat events. The "Store" tab is shown to include: equipment, auctions, personalized products, instructional products, myteam.com gear, and buying guides, all of which can be acquired as "ecommerce" (i.e. electronic commerce) items. For this set of Visitor information, anybody that comes to the myteam.com site will have access to such information. The viewing experience is generally the same for Members and Visitors.

Members of the myteam.com website will be provided an entry point 110, which will prompt the user for their Member-ID and password. Upon entering the system, Members are provided access to three types of mini-site areas, namely My Home, Team Home, and League Home. Each Member can have access to multiple instances of each type of mini-site, as they may have relationships with more than one Team and League.

links might include: League Finder, League Sponsors, League News, League Scoreboard, League Photos, League Locations, League Profile, League Teams, League Members, and League Fans. Each of these links pulls up pages relating to the listed topics, and which are particularized with information pertaining to that League. The information displayed

on the League Home mini-site pages will include information relevant to that League that was originally posted on a Team Home mini-site if that Team is part of the League.

Several of these pages themselves have links to editable versions of the pages or other tools that modify the contents of these pages. These editing tools and the links to them can collectively be referred to as League Tools 126, and are only accessible to the League Administrator(s).

There also exist links to transition between the three mini-site Page areas. A My Teams capsule is generally provided on a user's My Home page. By clicking on a link associated with a Team name in this capsule, the user will be linked over to the Team Page for that team. On the Team Page, there will exist a link to League Page associated with that Team. Both the Team Page and the League Page might also include a link to an even higher organization. For example, for a Little League (LL) team belonging to a local League, the Team Page and the League Page might include a link to www.littleleague.org, which is the public website for all of Little League.

Each mini-site will present a variety of information, which generally includes Photos 118, News 120, Schedules 122, and Scoreboard 124 information. The discontinuous line 130 associated with the Photos information 118 shows that photos will be particularized for each mini-site, and information will not be passed there between. Hence, "local" photos pertaining to the owner, the Team, or the League will be shown on each mini-site. Varying levels of photo crossover are intended to be included within the scope of the present invention. The ability for an individual to view photos will be constrained by each individual's security access to the information on the respective mini-site that the photos originated on. The discontinuous line 132 associated with the News information 120 indicates that different types of news will be shown for each different mini-site, without passing of information there between. For instance, the My Home news might include a National news feed. Team news is written and submitted by a Team Administrator. News that is on the League Home page is submitted by the League Administrator. Varying levels of news crossover are intended to be included

President (or the like) can also use a My Teams capsule that is generally presented on every My Home page to quickly jump over to the League Home area.

As noted above, there are publically viewable Team and League Home pages available for Visitors. These users, however, do not see a number of the capsules that are located on the pages. In general, the present system preserves a certain level of privacy when dealing with certain capsule information. Since the present sports-oriented website deals with youth, and youth-oriented activities, it becomes important to limit certain access to such Visitors. It might be detrimental if a Visitor were able to freely access practice schedules, pizza party information, or photographs of a particular child. Various examples of prior art do allow free access to such youth-oriented information. For instance, visitors to such prior art sites are able to freely access telephone numbers of League Officers and Administrators. Also, such visitors can access photographs of children and children's names posted on the website, and the like. This is unacceptable under the present invention, and access is limited based upon the security status of the individual accessing the site.

Referring now to Figure 2, an access level chart 200 is shown with four (4) key access levels in relation to the My Home, Team Home, and League Home web pages. Certain fundamental concepts behind the formation of the Community aspects of the present invention were derived (in part) from security models. Aspects of security access were taken and incorporated into determining the population of the Community. Hence, the present system pre-defines the access levels in relation to the Community relationships, and combines them into a consistent model. When an individual is invited or added to a Team or a League, their security access is pre-defined based on the role in the Community to which they are added. The types of Pages (i.e. My Home, Team Home, and League Home) are shown on the vertical axis, and are charted against the types of users (i.e. Non-Members and Members). Non-members would include the Anonymous Visitor (Spectator or Visitor). Members would include the Invited Guest (Fan/Friend), Participant, or Administrator. The Invited Guest is also referred to as a Fan or Friend. A Fan is also an invited guest of Team Home or the League Home pages.

The My Home page is the most private of the mini-sites, as it contains the personal information of the registered Member of the myteam.com site. In general, nobody can

In general, when creating Invitations the system could look at what relationship exists between individuals that share some commonality of community with other individuals, and predetermine what type of Invitation to send out. For example, kids on a team would likely give their coach the right to see their My Home pages. However, the coach might not necessarily wish to give the kids the right to see his own My Home page. This situation (and others like it) might prompt a two-way Invitation to be sent out that could be responded to in a one-way fashion. For example, the response to a two-way Invitation would be that the user would like to see the invitor's My Home page, but the user does not want to provide the right for the invitor to see the user's My Home page.

In box 212, the Invited Guest is shown as being allowed to see more information than a Visitor, because the Invited Guest is a trusted individual. The Invited Guest is not offered full access to the Team Home page, but can see more capsules than the Anonymous Visitor. The only way to become an Invited Guest is through approval of the Administrator of that particular Home page. As a result, a self-policing level of security is introduced. In box 214, the Participant is shown to have full viewing access to the Team Home page, as this will be a key viewing area for any Participant on such a team. In many cases, the Team Administrator would be the team coach, and would invite all of the players, their parents and team volunteers to become Participants to view the Team Home page. A Team Administrator will exist for the each team, and box 216 shows that full access (including edit rights) is allowed for such an individual.

The League Home page is similar to the Team Home page, though it contains more information. Box 218 shows that an Anonymous Visitor can see some information, but is limited from viewing certain capsule information. In box 220, an Invited Guest can see still more information. In box 222, a Participant can see still more information. The League Administrator has a large realm of responsibility, and box 224 shows the League Administrator having full access to the League Home page.

At the Team Home level, as indicated by the asterisk, the present system will allow Participants (i.e. players and volunteers) to also be able to see Fan Lists for each team, and to invite other people to be Fans. The Fan List includes both individuals that have been invited and those who have accepted. In general, only the owner of a page gets to see the associated Fan List, and send out Invitations in order to increase overall

accepting the invitation, the Father is afforded the opportunity to register with the website and thereby be granted a Home Page 270 as a registered member of the website. This home page can contain a variety of configurable capsules and/or window areas for information. Example capsules shown include My Schedule, My Teams, and My
5 Leagues. In each appropriate window, information is shown for the Father's various children (i.e. child1, child2) and the teams and/or leagues that the Father has chosen to include on the Home Page. As such, the Father will be able to view -- in one convenient location, as a registered member of the website with his own Home Page -- information such as practice and/or game schedules for his children, and/or any other information the
10 Father deems of interest. As each team or league changes such schedules the information will be accurately reflected on the Father's Home Page. The access level as to what types of information that the Father can ultimately view is dictated by the Father's role or relationship to the child.

Figure 2B shows an example of the resulting Home Page 272 that is created for
15 each registered website user. First, second, and third example community areas 274, 276, and 278 are shown in communication with the Home Page. Each of the community areas are in communication with each other, based upon the trading of information between the communities, as based upon the hierarchy between the community areas.

Figure 2C next shows a example block diagram of the parent (or guardian) 280 in
20 communication with three different community areas, i.e. football 282, soccer 284, and Little League 286. Child one 288 is shown belonging to both the football and soccer communities. Child two 290 is shown belonging to the Little League community. Accordingly, the parent/guardian is able to participate in the same communities areas as their children, via one collective view area, namely their Home Page as created by their
25 registration on the website.

Figure 2D next introduces the concept of the central website system and/or
database providing for (optional) auto-generation of an access level based upon the role of the person being invited to join the website. The central website and database 281 will store information such as the registrants and their access levels. The website 281 is
30 shown to include a message center 283 and a module (i.e. hardware, software, and/or code) 285 for automatic generation of the access level. The invitor person 287 sends out

an invitation that passes through the website's message center 283 and is routed to the invited person 289. In this example, the persons role = "coach." When person 289 accepts the invitation, the module 285 is invoked to generate the access level based upon this role.

5 Figure 2E shows a similar configuration as that shown in Figure 2D. In this instance, however, the invitation to person 289 causes a shell account 291 to be created which contains, among other things, the role and access level of the person being invited. Upon acceptance, block 293 is shown turning the shell account into a member account.

10 Referring now to Figure 3, a representative webpage 300 is shown of the My Home page for a player on a team. The various general information tabs 302 can be accessed from the upper border. Click-through hyperlinks 304 to the other pages of this mini-site are available on the left border, or navigation bar. Various capsules are shown on the page, including news 306, online games 308, store 310, polls 312, My Teams 314, My Messages 316, My Schedule 318, My Favorites 320, and instructional information 322.

15 Personalized information 326 is shown regarding the owner of this page (Jimmy Johnson), including for instance pictures of the Player in action, or captions regarding the Player's nickname. Advertisements 324 are also interspersed (in available spots) across the page. As noted above, the My Teams capsule (or click-through to a My Teams page), allows quick access to the Team Home and League Home pages for the various teams

20 with which this Player is affiliated. The My Teams capsule also includes a "Find any team" click-through link 315, as further described in association with Figure 6.

25 The My Messages Capsule and the My Messages page contain all messages sent from individuals who are also Members of the website and from the Administrators of the different Teams and Leagues in which the individual is a Participant. The My Schedule Capsule and the My Schedule page contain all scheduled personal events and all scheduled games, practices and events for the different Teams and Leagues in which the individual is a Participant. The My Schedule Capsule displays only the most current, forth-coming scheduled items, and acts as a summary of the full listing of information that is available on the My Schedule page. The My Schedule page displays all scheduled

30 items in a similar manner as the Capsule, but with no restriction of quantity. In addition, the My Schedule page displays a location name for each scheduled item. Clicking on the

scheduled item name in either the My Schedule Capsule or page will go to the detailed information page for that scheduled item. If the individual has edit access rights to the information being displayed, an “edit” access link will be displayed that will lead to an editable version of the page. On the My Schedule page, the location name will be a link to detailed information about that location if any is available in the Locations & Directions part of the Team or League mini-site. If the individual has edit rights to the location information being displayed, an “edit” access link will be displayed that will lead to an editable version of the page.

Referring now to Figure 4, a representative webpage 400 is shown of the Team Home page for a particular Team. The shown view is from the access vantage level of a Team Administrator. As before, the general information tabs 402 are available on the upper border, along with a caption 403 identifying the Team (Foster City Giants). Click-through links 404 to the other pages of this mini-site are available on the left border, or navigation bar. The various Capsules on the page include Team Photos 406, Team News 408, store information 410, polls 412, Scoreboard information 414, Standing information 416, and Schedule information 418. Again, advertisements 422 can be included in available spots on the page. A click-through link 420 is also included to provide convenient access to the League Home page associated with the particular Team. A click-through link 421 is also included to the external website of the parent organization if this team is part of a larger sports organization, such as Little League Baseball.

The Team Schedule Capsule displays games, practices and other events that are scheduled by either the Team or by the League that the team is in. The Capsule presents a summarized view of the information that is displayed on the Team Schedule page that can be accessed by clicking on the top of the Capsule or by clicking on the respective button in the navigation bar. The Standings Capsule displays the won-lost record of each Team in the same division as the Current team. The won-lost record is a summary based on the calculations of all of the game scores that have been entered by the League and by the other Teams in the same division. The Scoreboard Capsule displays the score and a brief description of the most recent game that has been played. More detailed information on the specific game can be accessed by clicking on the “more..” link. Clicking on the title bar of the Scoreboard or Standings Capsules will go to the Team Scoreboard page which displays all of the game scores. The News Capsule displays the 3 most recent news

stories that have been entered by either the Team Administrator or a League Administrator or its League. Clicking on a specific news item will display the full news article. Clicking on the title bar of the News capsule will go to the Team News page from which all current news articles created by the Team Administrators is displayed.

Referring now to Figure 5, a representative webpage 500 is shown of the League Home page for a particular Team. The shown view is from the access vantage level of a League Participant. Once again, the general information tabs 502 are available across the upper border, along with a caption 503 identifying the League. Click-through links 504 are available for access in the navigation bar area. The various Capsules associated with the page include: League photographs 506, League News 508, store information 510, League Standings 512, and the League Schedule 514. Advertisements 516 are similarly included on the page 500. The League logo 518 is also shown to further identify the page and to optionally provide a click-through link to a League's parent organization external site. A click-through link 520 is included to the external website of the parent organization if this team is part of a larger sports organization, such as Little League Baseball.

The League Schedule Capsule displays games, practices and other events that are scheduled by the League and games that are scheduled by Teams within it. The Capsule presents a summarized view of the information that is displayed on the League Schedule page. The League Schedule page can be accessed by clicking on the top of the Capsule or by clicking the respective button in the navigation bar. The Standings Capsule displays the won-lost record of each Team in the same division as the Current team. The won-lost record is a summary based on the calculations of all of the game scores that have been entered by the League and by the Teams in the currently selected division. Clicking on the title bar of the Standings Capsules will go to the League Scoreboard page that displays the most recent, and provides access to all of the game scores for the League. The News Capsule displays the 3 most recent news stories that have been entered by either the League Administrator for its League. Clicking on a specific news item will display the full news article. Clicking on the title bar of the News capsule will go to the League News page from which all current news articles created by the League Administrators is displayed.

Referring now to Figure 6, a representative webpage 600 is shown which might result from invoking the "Find any team" link 316 from the My Teams capsule of Figure 3 above, clicking Team Finder in the navigation bar of a Team Home page, or by clicking League Finder in the navigation bar of a League Home page. This search has located the team "Foster City Giants," as was specified by the user. The resulting page is similar to the Team Home page for the located Team, with a few exceptions. A list of additional options 602 is produced for this page, and presented via click-through boxes which are oriented in the navigation bar area, and superimposed over the previously listed click-through links. Having found this Team, the user is given a range of options relevant to their membership status in the myteam.com site. The options could include (but are not limited to): Become a member & remember this Team; add the Team to the player's My Teams area; request to be made a fan of this Team; try a search for another Team; or cancellation of the "find any team" operation altogether.

The interaction of the various features on the myteam.com website can further be illustrated by the site flow map 700 as shown in Figure 7. The user enters the map via the My Home Page 702. A My Communities click-through area 704 in the navigation column (i.e. the left-most column on the My Home page) links to access an area shown as My Friends (or My Fans, or My Guests) 706. My Friends (Fans) is a list of people with whom the user has a relationship. Exceptions (i.e. names not shown) might include those people that are on the same Team as the user. If all persons are so listed, then exploration of the Team's roster page will indicate which person's on that Team have a sharing relationship with the user. This My Friends list provides a form of "bookmarking" between a user's site and a Friend's site, and indicates whether the relationship is reciprocal, a Friend only sharing with user, or the user only sharing with Friend. If a Friend is listed in My Friends and the name is a link, then permission to view the other sites has already been granted. If a Friend is listed in My Friends and the name is not a link, then the Friend has permission to view the user's page, but the Friend has not granted permission to the user to view their site. If such permission has not been granted, a request can be formed via step 708 wherein the Fan asks the My Home page owner whether they can see various aspects. The request may be forwarded (or handled) through a message center 710.

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page 722 for that particular team. It is intended for the name of a league to be displayed next to a team that is in it, or a league by itself if the participant only has a role in a league. Additionally, the Team Finder option 724 might be used to find a particular Team. The user can also click-through to the My Teams page by clicking on the header of the My Teams capsule 720. The My Teams page displays the teams listed in the My Teams capsule, plus any additional Teams that do not fit on the Capsule and the Teams' respective Leagues.

Referring now to Figure 8, a first version of a My Friends web page listing 800 is shown. This page is the initial page that comes up when a user clicks on "My Communities" in the navigation column (i.e. the left-most column) on the My Home page. This page is viewable only by the owner of the page. The page is capable of displaying multiple tables, all sharing the same column headings. This first My Friends version shows a first table which displays "friends" who are people that the user has invited to be myteam.com Members, or other myteam.com Members with which the user has a relationship. Members of the Team that the user is a Participant in might be excluded. These "friends" are people that can see the user's My Home page, and vice versa. Subsequent tables are described in association with the alternative version of the My Friends web page (Figure 9 below).

In the first column 802, a listing of the names of the persons on the My Friends list is shown. If a name is not underlined or highlighted, i.e. name 804, then a click-through cannot be performed. If the name is underlined or highlighted, i.e. name 806, then permission has been granted by that person to see their My Home page. The user can thereby click-through on the name in order to see that person's My Home page. In column 808, the Member-ID or email of the listed persons are shown. The underlined or highlighted "myteamuserid" can be used to click-through and send a message to that particular myteam.com Member, through the myteam.com messaging system. Column 810 shows the access level for each listed name. If "yes" is shown, then the current Member has granted the person click-through access to their My Home page. Otherwise "n/a" might be shown if the current Member has not granted the person access to their My Home page and/or if the person is not a myteam.com Member. An "invited" status is shown if an Invitation (i.e. a reciprocal Invitation) has been sent to see the listed person's My Home page. Column 812 shows a "select" option which shows a checkmark if a

name is selected. The "deleted selected" tab 814 deletes the selected names from the My Friends list, resulting in their access to the current user's My Home page being terminated. The "cancel" button 816 serves to cancel the selection of any names. A button 818 for "invite a friend" facilitates sending an Invitation to Friends that are not on the list. A link back to My Home 820 is also shown.

Referring now to Figure 9, an alternative My Friends web page listing 900 is shown. In this arrangement, the user is given the option to select between a showing of My Friends or the listing of Teams the user is involved with via the click-through selector 902. A drop-down menu 904 is also shown for selecting which grouping to view. The dropdown values might include: All, Friends, Team1, Team2, and so forth. The listing of My Friends includes click-through names to see that person's My Home page, and click-through Member-ID ('myteamuserid') to send that person a message (as above). The access level is shown in the "See My Home" column. The Invitation column includes the type of Invitation (and indication of status). As before, names can be selected, deleted, or canceled via the corresponding selection boxes and control tabs. This arrangement also includes (optional) team listings for Team 1 (906), and Team 2 (908). These listings include fellow teammates on the particular team (and league) shown. An "invite" hyperlink 910 links to the Invitations page, where additional friends can be invited. A "My Home" hyperlink 912 links back to the My Home page. The "delete selected" button 914 removes the people that were selected from the table. The "Cancel" button 916 returns the user to the page from which they came without taking any action.

Figure 10 shows a first version 1000 of a My Teams web page listing. This is the destination page if a user clicks on the My Teams capsule header. In this first version, a "Find Team" hyperlink 1002 is shown, and a My Home hyperlink 1004 is shown. A table is shown with Teams listed and sorted according to the role of the user in relation to that Team. For instance, Teams on which the user is an Administrator are listed first, and so forth. In column 1006, the Team names are shown, with hyperlinks to various Team Home pages. In column 1008, the League Names are shown, or an indication of "not affiliated" if no such affiliation exists for a Team. It is intended that a League in which a Team on the list resides and the Member is a Participant in will also be listed by itself in its own row. This would facilitate the selection of that League independently of the

Team, as referenced in Column 1012. Column 1010 shows the role that the user has regarding each Team (i.e. Administrator, coach, player, fan, or spectator). Column 1012 provides the ability to select each Team from the My Teams list, and button 1014 facilitates deletion of the selected Teams from the table. Deleting a Team or League from this list will also remove the individual from having an relationship of Invited Guest, Participant or Admin access to that Team or League. The individual will not see a checkbox next to any Team or League listing for which they are the only Administrator.

Figure 11 shows an alternative version 1100 of the My Teams web page listing. Features not found on the previous version include a My Friends hyperlink 1102 which goes to the My Friends page. In column 1104, the sport is listed for each Team. A table is shown with the Teams and Leagues of which the Member is an Administrator for listed first, bolded, in a different color, and sorted alphabetically by team name. Following this are Teams of which the user is a Participant, sorted alphabetically, and so forth. Column 1106 shows the access level of the user in relation to each team listed. Each of these is hyperlinked 1108 to the Access Request page, except for Administrator. A Cancel button takes no action on any selected Teams, and returns the user to the page from which they originally came.

Referring now to Figure 12, a flowchart 1200 is shown of representative elements associated with the Team Communities site flow map. A user enters the mini-site from the Team Home page 1202. A Team Communities hyperlink 1204 is accessible from the navigation bar area on the Team Home page. The Team Communities hyperlink brings up the Team Roster 1206. From the Team Roster 1206, a Team Fans page 1208, or a Team Spectators (also "Team Visitors") page 1210, can be accessed. From each of these lists (1206, 1208, and 1210), invitations can be sent out to the persons on the lists. Such invitations may be facilitated by a message center 1214, or the invitations may be broadcast in bulk from the myteam.com website. Either email invitations 1216 or paper invitations 1218 can be sent out (which will include an Invitation-Number, as before). The recipient can thereafter use the Invitation-Number to complete the registration process 1220. On various pages with user listings, hyperlinks will provide the ability for the Admin 1224 to Change User Access 1226 for that user (See Figure 24).

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A Team Finder hyperlink 1230 can also be invoked from the Team Home page 1202. If such a Team Finder is used to find a team or league, additional buttons can be provided to facilitate requests for status changes in relation to that team or league. The Team Finder allows the user to browse through a listing of Leagues, sorted by
5 geographical location (country, state), sport, and alphabetically. Upon selecting a league, a list of the teams in that league are displayed.

The Team Spectators ("Team Visitors") page shows people who are not Invited Guests, but have requested to be granted Invited Guest status. The Administrator would thereafter go through the list and select which ones to approve and then invoke the grant
10 access function which would also result in an invitation being generated for those who are not yet members of myteam.com. A change of access operation is provided on the Team Fan and Team Roster pages for each individual listed who does not have administrator status. This enables access levels of Participant and Owner (Administrator) to be granted to those who already have at least Invited Guest access. Likewise, an individual's access
15 level can be set to a lower value than they currently have, such as an Owner can setting a Participant's access to Fan due to undesirable conduct on the Community site.

Referring now to Figure 13, a representative version of the Team Roster web page 1300 is shown. This is the initial page when the user clicks on "Team Communities" in the navigation column of the Team Home page. This version of the Team Roster page is
20 viewable only by the Team Administrator and focuses on the functionality of enabling the Administrator to communicate with the listed persons, and to invite the persons to become myteam.com Members. To be able to delete and add members to the roster, the user must click on the "Edit Roster" hyperlink 1302, to thereafter go to the Team Members - Team Administrator View (Unaffiliated) which is further described in League
25 Tools (See Figures 26-45 below). The shown view is one of many possible views for a Team Roster, including for instance the League Administrator view, and the Team Administrator view for Unaffiliated. Two tables 1304 and 1306 are shown having Team Volunteers (coach, administrator, field crew, etc) followed by Team Players. Both tables share similar columns.

30 As an alternative version, rather than having separate tables for players, volunteers, and the like, a field (not shown here) could be included which would indicate

the role of the listed person. Hence all persons will be included in one long listing, with the role indicated for each such person. Such roles might include: coach, administrator, team parent, field crew, player, and the like. As one example, the listings might be sorted according to such roles.

5 The Team Roster columns include a name column 1308, with each name having a
hyperlink to that particular person's information page. An access level column 1310
includes a hyperlink to the Change access page. Values for the access level might
include: coach, administrator, team-member, and so forth. Column 1312 shows the
phone number for each listed person. Column 1314 shows the myteamuserid or email for
10 each person on the Roster. The myteamuserid's are hyperlinked to the myteam.com
message center, whereas the email addresses are not hyperlinked. "N/A" might also be
shown if the person is not affiliated with myteam.com, or does not have an available
email address. Additional hyperlinks and buttons are also shown for the Team Roster
page. A Team Profile hyperlink 1316 provides a direct link to the Team Profile page. A
15 Team Fans hyperlink 1318 provides a direct link to the Team Fans page. A Team
Visitors hyperlink 1320 provides a direct link to the Team Visitors page.

Figure 14 shows another Team Roster web page listing 1400, but in this instance for a Team-Member view. This page is similar to that shown in Figure 13, except that it does not include the access level column from the previous page.

Figure 15 shows a first representation 1500 of the Team Fans web page listing. This page lists the myteam.com members who have been granted Fan access by the Team Administrator. An "invite..." hyperlink 1502 is shown tied to the myteam.com Communities invitation pages. A table is shown listing the Fans of this particular Team. A column 1504 includes the name of each Fan. Column 1506 shows the myteamuserid for each Fan. Each Fan can be selected via column 1508. The Delete Selected button 1510 can be used to delete the selected Fans from the table and from having Fan-level access to the Team pages. The Cancel button 1512 takes no action and returns the user to the page from which they came.

Figure 16 shows an alternative representation 1600 of the Team Fans web page listing. This version additionally includes a View dropdown menu 1602, with the initial view being "all." Dropdown menu values might include: All, fan, league administrator,

league volunteers, and league players. Depending upon the value chosen, the various Fans displayed in the table will have that particular access level. This version also includes an additional column 1604 which shows the access level for each listed Team Fan. Access level values might include: fan, league administrator, league volunteer, and league player. Each of these values is hyperlinked to the Change Access page.

Referring now to Figure 17, a representation 1700 of the Team Spectators ("Team Visitors") web page listing is shown. Team Spectators are generally people who have requested, but have not yet been granted Team Fan ("Invited Guest") status. The most common means by which people will appear on the Team Spectators web page is by finding the Team page through the Team/League Finder and clicking on a "Request Invitation" button. A "view" dropdown menu 1702 is shown, with an initial value of "all." The dropdown values would include: all, visited, invited, and members. A table is shown which lists the Team Spectators according to the dropdown menu value selected, and the corresponding status of each Team Spectator. A first column 1704 shows the name of each Team Spectator. Column 1706 shows the email addresses. Column 1708 shows the status of each Team Spectator, with the table listings sorted by status in the order of: Visited, Invited by Team, Invited, and Member. Column 1710 provides for selection of the Team Spectators.

A checkbox 1712 is included to "Auto invite all Spectators that are site Visitors to join myteam.com." If this box is enabled, the system will automatically send an invitation to all the site Visitors that "sign-in" to the Team Home page to join myteam.com. This invitation does not invite the Spectator to have Fan status, since this is a trusted relationship that should only be extended to people that the Team Administrator knows. Another checkbox 1714 is included to "Auto approve all members and visitors invited to Fan status by team members." Since the trusted relationship exists, then auto approval can be performed. The checkboxes are generally visible in all Views except "all."

Other hyperlinks and buttons are included. For instance, a team roster hyperlink 1716 provides a link to the Team Roster page. A Team Fans hyperlink 1718 provides a link to the Team Fans page. A "Grant Fan Access to Selected" button 1720 will only be made visible when the View dropdown value is "members." This feature changes access

to Fan status for those selected people. An "invite selected" button 1722 is only visible when the View dropdown value is "visited," and if the checkbox to "Auto invite all spectators..." is not enabled. This feature sends an invitation to become myteam.com members to the selected people. A "Cancel" button 1724 is only visible when either of the above buttons (1720, 1722) are visible. Clicking on this button takes no action and returns the user to the page from which they came.

Referring now to Figure 18, a representation 1800 of a League Members web page listing is shown. A league administrator will generally see a list of all League Members, and then they can be assigned to teams, and the like. The League Member list includes, but is not limited to, anybody that has signed the registration form, paid the registration fee, and has had their data entered by a league data processor. This page allows a League Administrator to go through and selectively invite any of the League Members to become myteam.com members. Batch invitations might also be sent out automatically to all Team or League members upon their being added, or be sent based upon such things as the person's title, and so forth.

A parent navigation bar 1802 is shown with example Guest click-through links, and example Member click-through links. A table is shown with League Members listed, and sorted with League Administrators at the top, and Players at the bottom. Column 1804 includes the League Member name. Column 1806 includes the League Title for each League Member, including for instance: League Administrator, President, Administrator, Treasurer, Assistant President, Head Umpire, and Player. Column 1808 include the myteam.com ID or email address for each League Member. Column 1810 allows selection of members. A View dropdown menu 1812 can be used to selectively limit the persons listed in the table. Dropdown values might include: all, Officers, Volunteers, or Players. An Invited Selected button 1814 allows invitations to be sent to the selected League Members. The Cancel button 1816 takes no action, and returns the user to the page from which they came. A League Fans hyperlink 1818 provides a link to the League Fans page. A League Visitors hyperlink 1820 provides a link to the League Visitors page.

Referring now to Figure 19, a first representative version 1900 of a League Fans web page is shown. This page displays all the myteam.com Members who have been

granted Fan access to the League Home page. This page is similar to the Team Fans page, however, this page is viewable only by League Administrators. No League Participants can see this page, as there is more concern for security at this level.

A table is shown of the League Fans, sorted alphabetically by Name (last and/or first). Column 1902 shows the listed names of the League Fans. A hyperlink is associated with each name to the Change Access page to enable the individual's access level to be changed. If an individual's access is change to Participant, their name will then appear in League Members and will disappear from League Fans. Column 1904 shows the myteamuserid for each listed name. A hyperlink is associated with each myteamuserid which facilitates sending a message to that person. Column 1906 shows select/deselect checkboxes for each listed name. The Delete Selected Button 1908 will remove the selected individuals removed from the table. The Cancel button 1910 takes no action and returns the user to the page from which they came. The "invite..." hyperlink 1912 links to an invitations page, as populated by My Communities invitations.

Referring now to Figure 20, an alternative version 2000 of the League Fans web page is shown. This page is similar to the one shown in Figure 19. A parent navigation bar 2002 is shown across the top, and includes Guest and Member hyperlinks. Also in this version, a View dropdown menu 2004 allows the selection of only individuals with a specific access level to be viewed. Access levels might include: fan, league administrator, league volunteer, or league player.

Referring now to Figure 21, an example representation 2100 is shown of League Spectators web page listing. League Spectators are generally people who have not been granted any special access, but have requested it. If a League Administrator has sent out an invitation to a Spectator, then this page would provide the status of the invited who have not yet accepted such invitations.

This page lists all of the site Visitors and myteam.com Members who have found this League page using the Team/League finder, and have clicked on a "Request Invitation" button that appears on the League home page in that context. A View dropdown menu 2102 is shown with an initial value of "all." Example dropdown values would include: all, visited, invited, or member. A table of League Spectators is shown, and the list includes names sorted according to their status, and limited by the dropdown

menu choice. Column 2104 shows the list of League Spectator names. Column 2106 shows the email address for each listed Spectator, with a hyperlink associated with the name for send the Spectator a message through the Message Center. Column 2108 shows the status of the listed Spectator, including status value including: visited, invited, or member. Members have a hyperlink through the status display enabling the League Administrator to click-through to the Change Access Level page for the selected individual and change their access level to a Participant or Owner (Administrator). Column 2110 provides a checkbox for selecting various Spectators. A checkbox 2112 is provided to "Auto invite all league spectators who are not myteam.com members to join myteam.com." The Invite Selected button 2114 is only visible when the View dropdown value is "visited" and if the "Auto invite..." checkbox is not enabled. This button sends an invitation to the selected person to become myteam.com members, but does not grant them Invited Guest access. A "Grant Fan access to Selected" button (not shown) is visible only when the View dropdown value is "member." This button changes the access to Fan status for those selected people. Once granted Fan status, the selected individuals will appear on the League Fans webpage and will no longer appear on the League Spectators webpage. The Cancel button 2116 is visible only when either the "Grant Fan..." or "Invited Selected" button are visible. This button takes no action, and returns the user to the page from which that came. The League Members hyperlink 2118, and the League Fans hyperlink 2220 each link to those respective web pages.

Figure 22 shows a first representative version 2200 of a New Invitations web page as would be accessed from an individual's My Home page. A first table on the page allows invitations to be sent for joining myteam.com. A second table allows a Member to invite friends and family whom are already Members to visit the home page of themselves, their team, or their league (i.e. My Home, Team Home, and League Home pages) on myteam.com. The invited persons will be added to the respective Visitor's Community list on the personal, team, or league pages. When the invitees have joined myteam.com their name will be added to the respective Community page. For each name in the "Join myteam.com" table, a first pulldown menu 2202 allows the invitor to chose what the invitee is allowed to see. Example pulldown values for My Communities include: My Home, My Home & Team1 Home, My Home & Team2 Home, and so forth. A second pulldown menu 2204 allows the relationship between the invitor and the invitee

to be specified. Example pulldown values for My Communities include: Friend, Parent, Relative, and Family Friend. Example pulldown values for Team Communities include: Team-member, Friend, Parent, Relative, or Family Friend. This provides the Administrator with a quick reference as to the trustworthiness of this extended invitation, as the Administrator will be required to approve the various invitations. A "Send Now" button 2206 submits the entered persons and returns the user to the page from which they came, with new persons added to the table listing on that page. The "Send and Add More" button 2208 submits the entered persons and returns the user to the invitations page to add more persons. The "Cancel" button 2210 takes no action and returns the user to the page from which they came.

Figure 23 shows an alternative representation 2300 of the New Invitations web page listing. This is a simplified version of the page shown previously, in that only a single table is used, and no pulldown menus are provided. Instead, the invitor enters the name and email address of the person to be invited to join the myteam.com website. The invitations are thereafter sent out via buttons similar to those described above and include Invited Guest access to the My Home, Team Home or League Home page from which this page was accessed.

Referring now to Figure 24, a first version 2400 of a Change User Access page is shown. This page is typically used by an Administrator to facilitate an access change for a particular user. This page, or another page, such as the edit version of information for an individual, would be accessed by first selecting the name of the individual. The type of page (i.e. team page or league page) is displayed in area 2402. The "Access to:" information is displayed in area 2404. The "For" information 2406 shows the myteam.com member name and myteamuserid. The "Change from" information 2408 indicates the current access level of the user. The "To new access level of" information 2410 includes a dropdown menu of access level values that can be assigned. Such values might include: Team Administrator, Team Participant, Team Fan, and so forth. The "submit" button 2412 invokes the change request. The "Cancel" button 2414 takes no action, and returns the user to the page from which they originated.

Figure 25 shows a representative version 2500 of a Request for a Change of Access page. This page would typically be used by an individual wishing to change their

Teams 2616, Roster (subset of Members) 2618, and Contacts (subset of Members) 2620. The League Profile sidebar item is associated with the League 2602, Officers 2608, and Divisions 2604 blocks (as indicated by the single asterisk). The League Teams sidebar item is associated with the Contacts 2614, Teams 2616, Roster 2618, and Contacts 2620 blocks (as indicated by the double asterisk). The League Member sidebar items are associated with the Volunteers 2610 and Members 2612 blocks (as indicated by the triple asterisk).

Note that the Divisions aspect might also be incorporated differently, as needed to support certain league/association configurations. For instance, in Pop Warner, AAU, tournament play, and the like, teams that play one another do not necessarily all reside within the same league. As such, the underlying database structure would allow for less rigid associations of a team with a particular division, or league.

The League profile sidebar item provides access to data that tends to be set up once at the beginning of a season. This is generally the "high-level" information about the league. This high-level information includes General League Data, League Officers, and League Divisions. General League Data includes such items as league name, location (state, zip), primary contact person, and national affiliation (if any). League Officers usually consist of a President, Treasurer, Secretary, etc. League Divisions are used to manage sets of similar teams (i.e. age, sport) that play one another and compete in standings. Figure 27 identifies eight possible screens (or pages) that might be used to comprise this section. The Overview page 2700 provides contact and officer information. Page 2702 provides for editing league information. Officers (i.e. single or multiple) can be added to the League via 2704. The Officers can alternatively be assigned from a list of existing League volunteers via 2706. A list of Divisions is available for viewing via 2708, and the divisions can be edited, or new divisions can be added, via 2710. The blocks with dotted lines represent jumps into other sections of the web site, so they are generally not considered to be part of this current area (or hierarchy). Volunteer Details 2712 is associated with the League Members area, and Team Info & Roster 2714 is associated with the League Teams area, both described above. Block 2716 provides the ability to list teams with a division selector. Block 2718 provides the ability add new teams (one at a time). Several pages also have shared implementations. Add Officers

2704 shares an implementation with Add Players and Add Volunteers. Assign Officers
2706 shares an implementation with Assign Players and Assign Volunteers.

Referring now to Figure 28, certain representative elements are shown comprising
a League Profile Overview web page (or screen shot) 2800. This screen provides read
5 access to two sets of information: basic league contact information, and the list of league
officers. This screen also provides links or actions to access the divisional hierarchy, edit
all general league data, and manage the list of league officers. The name of the officer is
provided in column 2802, with the officers listed in alphabetical order by last name. The
email address of each officer is provided in column 2804. Both the name and email
10 addresses can have hyperlinks for messages to be sent to that person, and/or information
retrieved about that person. Column 2808 shows a checkbox to remove an officer.

This page is available to all visitors, but is editable only by league administrators.
There are two types of data groups available on this page: League Info and League
Officers. The types of viewers of the page include: Anonymous Visitor (AV), Invited
15 Guest (IG), Participant (P), and Administrator (A). The information can be available for
read, write, or none access based upon the type of user. In this instance, the
Administrator can write League Info and League officer data. Participants can read both
types of data. AV and IG can only read League Info. Data to which the user does not
have read rights should not be displayed to that user. Therefore, the page is dynamic. If
20 there is no access to League Info., then that data is not displayed. If there is no access to
League Officers, then that table is not displayed.

Access to the actions (i.e. hyperlinks shown as edit league info, add officers,
assign officers, and remove checked) as shown in box 2810, are generally available to
users with write access. All visitors to a page see the contact information. The only
25 difference between read-users and write-users is that write-users can see the "Remove"
checkbox in column 2808. League address and contact information is displayed in 2812,
along with a league logo 2814 (if available). This information is accessed directly from a
league's record in the website's league database.

Referring now to Figure 29, certain representative elements are shown which
30 comprise a web page 2900 for editing the League Profile. A similar page is used to add a
league to the website. This page generally permits the user to edit the data associated with

the league itself (as opposed to data that might be embedded more so within the league's hierarchy of information). The League Basics are entered in the fields shown by 2902. Primary league contact information is entered in the fields of 2904. A link ("assign") is included that allows the user to select a primary contact from a list of existing league volunteers. This link leads to the "Choose Contact" screen, described below.

Welcome messages to the league can be entered via 2906. If a league logo exists, it will be displayed on the screen as indicated by the file in box 2908, which uploads the image, and overwrites any old images. One of the checkboxes 2910 is shown for "Delete existing logo." The message and logo allow the league to customize their home page with their league logo and a short message welcoming the people to the league site. The message is a text-only message entered into the profile and is thereafter viewable only from the league home page. The logo can generally be restricted in size (i.e. 100K) for ease in uploading to the web page and subsequent downloading by viewers of the web page. Only one logo may be uploaded and dropped into the "league logo" slot. This logo is displayed at the top of the League Profile page, in addition to being displayed on the league home page.

Access to actions is standard in that actions are available only to users with write access to the page. This particular page is only available to league administrators. Another checkbox 2910 also shows the option to "Allow teams to create themselves." This checkbox controls whether or not teams can be added in a "bottoms up" manner to a league. In the strict security model, all teams inside a league must be created by a league administrator. The league administrator thereby allows access requests or changes to be made. This checkbox overrides that control, so that anyone can create a team and "enter" it into the league. Among other advantages, this makes it easier for the coach to add teams into currently inactive leagues. The "allow teams" checkbox will not be displayed for certain leagues (i.e. Little League Baseball leagues, or others that do not provide this ability). For Little League Baseball, the security remains tight, therefore the "allows teams" setting is turned "off" for all Little League teams, and the checkbox control is not displayed for Little Leagues. This checkbox can be made not available for specific organizations that have a business relationship with the website and have requested the feature to be removed as such. For all other organizations, this checkbox is displayed and the "allow teams" setting is turned "on" by default. If teams are allowed to be added, an

“add a team” action link will be available in the Team Finder when browsing the teams contained within a league.

All information on this particular page is stored in a single record, i.e. the league's main record. This includes primary contact fields (i.e. name, email, and phone).

5 Although it is likely that the primary contact for the league will be listed in the individual table, making this a freeform field allows the Administrator to change this information independently. When the first league Administrator is assigned (or becomes active) on this league, his or her name and contact information is automatically copied into these three fields. As such, this critical information is filled in automatically (at least the first
10 time).

Referring now to Figure 30, certain representative elements are shown which comprise a web page 3000 for choosing a contact. This screen is used from the team and league profile edit screens. The screen is generally used to select a volunteer as the primary contact for the team or league. For both the team and league, a list of available
15 volunteers is displayed, in this instance "available league volunteers." All available volunteers in this league are listed with radio buttons to the left of each name (for selection). Selections on this page are mutually exclusive as only one button can get selected and if a different button than the current one is selected, it replaces the prior one as the only selection. If the paging of the screen information kicks in, then prev/next or
20 similar control buttons will appear on the screen. Clicking on the “submit checked” action link confirms the current selection as the primary contact. Clicking on the “cancel” action link will cancel the user's selection (if any) and return to the previous page. If the user chooses to submit without selecting a radio button, no error is displayed and the user is simply returned to the profile edit screen, and the contact information
25 remains unchanged. A help text block 3006 is also shown, which directs the user to: 1) check the league volunteer, and 2) click the assign selected item to add the volunteer as the primary contact. In general, the title of the page should change to show the league name, if in the league context. The user selects (or checks) a volunteer and then invokes the assign checked action 3004 (which might also be labeled "choose selected") to add
30 the volunteer as the primary contact. Access to this page depends upon the context, i.e. whether the team or league profile information is being edited. Generally, however, the

administrator has write access. All actions are accessible by individuals that can get to the page.

Figure 31 shows certain representative elements that comprise a web page 3100 for allowing the user to view and delete League Profile Division information for the league (versus the Overview selection from Figure 28). Note that this page (and others) might change significantly for certain specialized leagues, including for instance Little League Baseball. A League Divisions table is shown the Division name in column 3102. To determine the age that players in youth sports leagues can be and qualify to play on a team in a given division, the qualifying age range is determined from the "born after" date as shown in column 3104, and the "but before" date as shown in column 3106. The sport is shown in column 3108 and the Division is listed in column 3110. The number of teams in each division is shown in column 3112. Checkboxes 3114 can be used for removing any division.

The page may be read by the public, and may be edited only by league administrators. Access to actions, as shown in 3116, are available only to users with write access to the page (i.e. the Administrator). Certain columns might also be made to appear only to individuals with edit access to the page. Read only visibility might only show the Division name, born after, born before, and sport items. Little League Baseball might also warrant a separately viewable column for "LL Division." The "Sport" column might also be hidden if the national organization with which this league is affiliated is associated with only one sport.

Most of the information can be databased (or stored) right on the division record. However, the number of teams must be calculated by query to see how many teams are in each division. Little League division information might be stored in a separate record.

The Update charter button (or link) 3118 is visible only to administrators of specialized leagues including Little League Baseball. This button links to a page that totals the number of teams in each type of "officially chartered" division and facilitates the updating of a league's charter to include new types of divisions not previously chartered. The button facilitates the syncing up of charter information with the teams listed in myteam.com. Once this charter information has been set or updated, it can be

sent to Little League on a regularly updated (i.e. daily) or manual basis. This button can be made to warn the user before performing its operation, with a simple message box.

Referring now to Figure 32, certain representative elements are shown which comprise a web page 3200, which allows the user to add, edit, and remove league divisions. The screen uses a "freeform" approach, which lets the user enter division data into edit boxes, which can be changed as needed. Skipped rows will not be processed and stored. Column 3202 provides edit boxes for the Division names. Columns 3204 and 3206 enable entry of birthdates to determine the youngest (born before) and oldest (born after) players that can qualify to play on teams in this division. Column 3208 provides a box for the sport associated with each division, and might also include a drop-down list from which to choose. Column 3210 (optional) provides a LL Division column that is only visible to LL administrators. This enables the type of division (minors, majors, etc) to be indicated for each division without such designation being required in the division's name. The LL Teams column 3212 is optional and allows entry/display of the number teams in that LL division.

This page is generally accessible only to league administrators. The page will implement this by checking for the "League Divisions" data group, and only permit access to users with at least "edit" access. Once the user gets to the page, all actions are accessible. Of course, since a "read" user cannot even get to this page, "read" users cannot utilize the shown actions. The LL Division column is displayed only if the league is a member of the LL organization. The Sport column is not displayed if the national organization is affiliated with only one sport. The control is filled with different values depending upon the national organization with which the league is affiliated.

Error messages are displayed for incorrect entries. In this multiple entry form, it becomes important that the information entered is not lost on errors. Display of the error page, and a "try again" link, brings the user back to the edit screen, with all existing entries intact (except that invalid data might be excluded). If all required field entries in a row for a current division are made empty, then upon submission an error dialog will appear warning the user that this will result in the division being deleted from the league, and will also delete all teams in that division and the relationship of the players and volunteers assigned to them. An "OK" button on the dialog will complete the submission

Referring now to Figure 37, a block diagram is shown of certain representative elements 3700 comprising the League Members sidebar item. This sidebar item provides access to information about the people that make up the league, i.e. the players, volunteers, and officers. Since access has been provided to the officers in the League Profile, this section provides access to League Players, and League Volunteers. League Players provides for tracking players in the league, regardless of their affiliation with an individual team. League Volunteers provides for tracking the volunteers of the league (coaches and other individuals) that help run the league, regardless of their affiliation with an individual team. Figure 37 identifies screens that might be used to comprise this sidebar item. The Member block 3702 provides the entry point for accessing information about Players & Volunteers. Block 3704 provides the ability to Add players or volunteers, whereas block 3706 allows information to be imported from desktop (or other) software. Block 3708 provides further Player/volunteer details (as desired), and such information can be edited via 3710. The Player Contacts block 3712 displays information for parents and emergency contacts for a Player. Block 3714 provides the addition of a Contact and/or Parent to a Player's information and block 3716 provides for editing a Contact's information. The Invitations 3718 and Printed Invitations 3720 boxes are shown with dotted lines to represent jumps into other sections of the web site.

Referring now to Figure 38, certain representative elements 3800 are shown comprising the League Member page with Players/volunteers shown thereon. By using the link 3802, the user can decide whether to view players or volunteers. In this instance "Players" has been selected. This page is reached through the League sidebar. On the volunteer side, all non-players (all individuals with a role association type not equal to 'player' or 'contact') are listed. On the player side, only the players are listed. The table 3804 shows the name, phone, and email of the listed players, along with a remove checkbox. A list of actions are shown as 3806.

Figure 39 shows certain representative elements 3900 comprising the screen used to add players, volunteers, or officers to the league. This particular page permits the user to add up to 15 players, volunteers, or officers to the league, all at once. Since all information about the league member cannot be entered on this multiple-entry screen, the user may later click on the member and edit that individual's information in order to fill in more details not captured on this screen. The title of the page will reflect the operation

that the user is performing, i.e. Add Players, Add Volunteers, Add Officers, or Add
Contacts (instead of "New members, as shown). A link might also be provided to allow
the user to "submit and add more" if the form is filled up, and more individuals need to
be added. Required fields might also be given a special designator, such as red labeling
or the like. The table 3902 provides for entry of the first and last name, myteam-Id
(Member-ID), email, phone, and title of the individual. Title may be a free-form entry
field or may be a dropdown menu of pre-defined choices. The user action links 3904
allow the entries to be submitted or cancelled. For a Submit action, and for each
member being added, database entries are created as follows: create and fill in an
individual record with most fields; role association of the individual to the league; role
association of the individual to the team (if being added to the team); role association of
the individual to a player (if a contact being added to a Player); if a valid Member-ID is
provided, set a security association to the league in the Member Account record that
contains the Member-ID; if a valid Member-ID, set a security association to the team (if
being added to the team) in the Member Account that contains the Member-ID; if no
valid Member-ID is provided, create a Shell Account for the individual and set a security
association to the league in that Shell Account, and a security association to the team (if
being added to the team) in that Shell Account. It is intended that Invitations be
automatically sent when an individual is added.

This page is generally available only to Team or League Administrators. The
system implementing the site checks for the proper data group (depending upon whether
the user is intending on adding players, volunteers, players to the Team or League, or
Contacts to a Player). Access to this page is permitted only if the user has "write" access
to the data group. There are generally no changes to the inner workings of the page based
upon access level of the user. However, the title and some of the columns do change
based upon whether the page is being used to add player, volunteers, officers, or contacts.
Access to actions is all standard, in that actions are available only to users with "write"
access to the page.

Most of the information on this page (except for the "title") should be stored in a
single record, namely the individual record. The title field is actually stored in the role
association. The Member-ID is stored in the Member Account record as a form of the
user's account number. When this page operates at the "team" level (i.e. when a player or

volunteer is being added to a team), a role association is created to both the team and the league. This type of association with the league matches the type of the association with the team (player or volunteer).

For any individual being added with a valid Member-ID, the submit operation has security implications. From this screen, new individuals with valid Member-IDs are always added as Participants to the target entity. In addition, if an individual is being added to a Team, then a Participant-level League relationship is also automatically created. For example, if a volunteer is being added to a team, and a valid Member-ID is provided for that new volunteer, then the new individual should be given Participant-level access to the team and to the League. For individuals being added without a valid Member-ID, a Shell Account is created for each Individual and which contains the Participant-level relationships, but in an in-active state until an Invitation to the League (or Team) is accepted and the Shell Account is turned into a Member Account.

It is intended for there to also be a similar add page, which performs the same as 3900 but which only provides for one individual to be added at a time. Such page would allow input of additional fields of information related to the individual and would provide an action link that would submit the current individual and clear the page for the entry of the next individual. If a player is being added, this page would also display fields to add 2 parents/guardians as contacts.

Referring now to Figure 40, certain representative elements are shown of a web page 4000 for assigning players or volunteers to teams, or to permit the designation of officers in the league. In this instance, the "Player" view of league members on this page has been selected from link 4002. A list of players 4004 are shown, which can be selected (via the checkboxes) and assigned to the team indicated above. The players listed are those whose birthdate qualifies them to play on teams in the Division selected in the dropdown menu 4008 and who are not currently assigned to a team. The selection choice in the dropdown menu of "All" will show all players in the league who are not currently assigned to a team. This "All" view enables the age restriction to be "overridden" and players assigned to a team that would not otherwise qualify due to the age restrictions for the division the team is in. The user actions are shown as 4006. A help box 4010 provides instructional text on using the page.

Figure 41 shows certain representative elements of a web page 4100 for assigning volunteers to a team (as similar to Figure 40). In this instance, the list of volunteers 4102 can also assigned as an administrator via the checkboxes 4104. The possible user actions 4106 include assigning the checked individuals to their new roles.

5 Figure 42 again shows a similar set of representative elements comprising a web page 4200 for assigning officers to a league. In this instance, the list of league volunteers are those whom have not already been assigned as league officer or administrator. They can also be selected to be an administrator for the league via the checkboxes 4204. If only a name is checked, and not the "assign" checkbox, then the volunteer will be
10 assigned as an officer accordingly, without being made an administrator.

The pages represented in Figures 40-42 are available only to league administrators when the page is accessed as part of a league entity. The pages are available only to team administrators when the page is accessed as part of a team entity. There are no changes to the inner workings of the page based upon access level.

15 However, the title and "section switch" control (i.e. link 4002) do change based upon whether the page is being used to assign players, volunteers, or officers. Also, the "assign as admin." column is displayed only in Volunteer or Officer mode. Since these pages can be invoked from a number of contexts, the behavior of the controls will change based upon the context.

20 These pages utilize the standard style-sheet for modal selection from a list. As a result, controls for paging through the list of qualifying individuals (such as previous/next or alphabetical selection) may show up if more than a predetermined number of names are available for display. The Division control appears in the "Assign Player" context. This control contains a list of all divisions in the league, with the last selection being
25 "All." The default selection is the division in which the team resides that is currently having players or volunteers assigned to it. If there is only one division (or none from the user's point of view), then this control is not displayed. If the division selection is changed, then the page is refreshed to reflect the newly selected division and the individuals who qualify them to participate on team in that division. Various explanatory
30 text can be displayed (in context) to help the user through the process.

Assigning a member means that a role association and a security relationship is created between the individual and the team or league. The role association and security relationship is stored with the Member Account if the individual has a valid Member-ID and is stored with the Shell Account if the individual is not yet a Member. Unless the "assign as admin" checkbox is selected, the security relationship created is always at Participant-level access. If the "assign as admin" checkbox is selected, then the security relationship is admin-level access. If a player is assigned to a team, and that player has contacts listed, then the contact users should also be added with participant level security access to the team.

Referring now to Figure 43, certain representative elements are shown comprising a web page 4300 for displaying a league member's detailed information in the "read" mode. If the user has edit access to the individual's record, then an edit button is displayed on the page. The page can be accessed from: the league profile screen (by clicking on an officer); the league member's screen (by clicking on a player or volunteer); the team roster (by clicking on a player or volunteer); or another individual's detail screen (by clicking on a contact). No cancel functionality is provided from this screen. It is intended for there to be a "back" button that would return the user to the previous screen. This page represents the "deepest" level of the pages through which a user can progress (in this example hierarchy).

The player information 4302 is shown with various fields, including name, address, email, gender, birthdate, and comments (i.e. allergic reactions). The player contact list 4304 displays parents and emergency contacts and includes the name, phone number, email, and relation to the player of each listed individual. A remove checkbox is provided with each contact name. The user actions 4306 allow for further manipulation of the displayed Player information (including edit, add contact, assign contacts, or removed checked). Clicking on a contact's name 4308 will display an edit page for the information for the contact individual.

Figure 44 shows certain representative elements of a web page 4400 for displaying (or changing) Officer information. The Officer information fields are displayed in 4402. It is not intended for there to be an officer contact list 4404 as this is

only provided for players, not league officers and volunteers. The user actions 4406 allow for further manipulation of the displayed data (same as above).

Figure 45 shows certain representative elements of a web page 4500, which permits editing of an existing individual in the league and/or team. A similar page provides the means to add an individual to the league and/or team. The page is accessed from the individual's "read" view. If the user has write access to the individual's record, then an edit link on the page brings the user to this page. The editing layout includes the vital statistics 4502 for the individual. In general, the birthdate will not be shown for volunteers or officers. Certain required fields would include first name and last name. The birthdate would be required for players, and a phone number would be required for contacts. Communications information is shown in 4504, which includes the person's myteam-id. The individual's role (including title/job, and access level) are shown in 4506. The access level might include a dropdown menu of valid choices for this individual. The address is shown in 4508 with standard fields. The context of the access level setting is intended to be labeled to be either team or league as the individual's access may be different to a team as it is to the league the team is in.

When the myteam-id (Member-ID) is set or changed on a player or volunteer, then a security relationship is created between the named Member-ID and the entities (Teams and Leagues) to which the individual is connected. If a Member-ID is being replaced, then the individual's security relationships are transferred to the Member Account for the Member-ID. For volunteers or officers, the access level set for the named Member-ID matches the access level control on the screen (by default all volunteers and officers are given Participant level access). For players, the access level is always set to Participant automatically.

When using this screen to add a contact to a player, the role association is set between the two individuals as appropriate (either Contact or Parent). Once the role association is set, if the contact is a parent, they are given Participant access to the Team and its League that the Player is a Participant in. If the contact is not a parent, they are given Fan access to the Team and its League that the Player is a Participant in. When an individual's security relationships are set up with a team or a league, the security

relationships of the individual's contacts should also be set up. When the individual's security relationship is severed, then those contact's relationships should also be severed.

SECTION 3 -- GENERALIZED COMPUTER SYSTEM EMBODIMENT

FIGS. 46A and 46B illustrate a computer system 4600 suitable for implementing
5 embodiments of the present invention. A website or webpage can be hosted on
computers and servers generally conforming to the description below. Users will also use
similar computers to access such websites and webpages.

FIGURE 46A shows one possible physical form of the computer system. Of
course, the computer system may have many physical forms ranging from an integrated
10 circuit, a printed circuit board and a small handheld device up to a huge super computer.
Computer system 4600 includes a monitor 4602, a display 4604, a housing 4606, a disk
drive 4608, a keyboard 4610 and a mouse 4612. Disk 4614 is a computer-readable
medium used to transfer data to and from computer system 4600.

FIGURE 46B is an example of a block diagram for computer system 4600.
15 Attached to system bus 4620 are a wide variety of subsystems. Processor(s) 4622 (also
referred to as central processing units, or CPUs) are coupled to storage devices including
memory 4624. Memory 4624 includes random access memory (RAM) and read-only
memory (ROM). As is well known in the art, ROM acts to transfer data and instructions
uni-directionally to the CPU and RAM is used typically to transfer data and instructions
20 in a bi-directional manner. Both of these types of memories may include any suitable of
the computer-readable media described below. A fixed disk 4626 is also coupled bi-
directionally to CPU 4622; it provides additional data storage capacity and may also
include any of the computer-readable media described below. Fixed disk 4626 may be
used to store programs, data and the like and is typically a secondary storage medium
25 (such as a hard disk) that is slower than primary storage. It will be appreciated that the
information retained within fixed disk 4626, may, in appropriate cases, be incorporated in
standard fashion as virtual memory in memory 4624. Removable disk 4614 may take the
form of any of the computer-readable media described below.

CPU 4622 is also coupled to a variety of input/output devices such as display 4604,
30 keyboard 4610, mouse 4612 and speakers 4630. In general, an input/output device may

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be any of: video displays, track balls, mice, keyboards, microphones, touch-sensitive displays, transducer card readers, magnetic or paper tape readers, tablets, styluses, voice or handwriting recognizers, biometrics readers, or other computers. CPU 4622 optionally may be coupled to another computer or telecommunications network using network interface 4640. With such a network interface, it is contemplated that the CPU might receive information from the network, or might output information to the network in the course of performing the above-described method steps. Furthermore, method embodiments of the present invention may execute solely upon CPU 4622 or may execute over a network such as the Internet in conjunction with a remote CPU that shares a portion of the processing.

In addition, embodiments of the present invention further relate to computer storage products with a computer-readable medium that have computer code thereon for performing various computer-implemented operations. The media and computer code may be those specially designed and constructed for the purposes of the present invention, or they may be of the kind well known and available to those having skill in the computer software arts. Examples of computer-readable media include, but are not limited to: magnetic media such as hard disks, floppy disks, and magnetic tape; optical media such as CD-ROMs and holographic devices; magneto-optical media such as floptical disks; and hardware devices that are specially configured to store and execute program code, such as application-specific integrated circuits (ASICs), programmable logic devices (PLDs) and ROM and RAM devices. Examples of computer code include machine code, such as produced by a compiler, and files containing higher level code that are executed by a computer using an interpreter.

Although the foregoing invention has been described in some detail for purposes of clarity of understanding, it will be apparent that certain changes and modifications may be practiced within the scope of the appended claims. Therefore, the described embodiments should be taken as illustrative and not restrictive, and the invention should not be limited to the details given herein but should be defined by the following claims and their full scope of equivalents.